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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,541	01/04/2002	Andrew Brown	COMP:0229 P01-3580	7276

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Intellectual Property Administration
Legal Dept., M/S 35
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EXAMINER	
TRIMMINGS, JOHN P	
ART UNIT	**PAPER NUMBER**
2133	

DATE MAILED: 08/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/037,541	BROWN ET AL.	
	Examiner	Art Unit	
	John P. Trimmings	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

In view of the Appeal Brief filed on 7/14/2005, PROSECUTION IS HEREBY REOPENED. A Non-Final Office Action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claims 1-25 are pending.

Response to Arguments

1. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

2. Claims 1, 9, 21 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation in each of the said claims, paraphrased as; "... the JTAG master is configured to be accessed remotely ... via the

JTAG interface." is not supported in the Specification. Furthermore, the examiner notes, the applicant has also stated in the Appeal Brief the same ambiguous limitation on page 4, in the final 4 lines of the 1st paragraph (among other locations in the Appeal). In contradiction with the subject claims and the Appeal Brief, the applicant has disclosed in various parts of the Specification (page 21 lines 16-21, page 22 lines 14-21, page 23, lines 1-5) that the communication path between the JTAG master and the remote location is through IOP 302 and the local bus 310, and so the subject claims are indefinite in that the examiner is unsure of what the applicant intends to disclose in the claims. It is plain to the examiner that the limitation, "via the JTAG interface" in the last line of each claim is vague and indefinite, for it wrongly leads one to believe that a JTAG interface connects the remote location with the JTAG master.

Claim Rejections - 35 USC § 103

3. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., U.S. Patent No. 6598193.

As per Claims 1 and 9:

Li et al. teaches a remote server management controller disposed in a managed server (column 1 lines 19-20), the remote server management controller (FIG.1 14, and column 2 lines 13-14) comprising: an IOP (FIG.4 102, and column 3 lines 10-13, "management controller may be a processor"); an embedded JTAG master (FIG.1 16 "EMBEDDED JTAG TEST ROUTINE) that is controllable by the IOP (column 3 lines 1-20), the embedded JTAG master having a JTAG interface (FIG.2 42); and at least one

integrated circuit (FIG.2 30) disposed in the managed server (FIG.1 12) and connected for operative communication to the JTAG interface (see FIG.2 and 4), and wherein the JTAG master is adapted to be accessed remotely (column 5 lines 7-15) through the remote server management controller (FIG.4 120 via modem and 106, or via Ethernet interface 120) to provide communication between a remote computer (FIG.4 126, Remote System) and the at least one integrated circuit (FIG.2 alternately 38) via the JTAG interface. Li et al. however fails to explicitly teach an "IOP". But, the examiner notes that the applicant discloses that the IOP "provides general control and functions as a management processor" (paragraph [0054] of the applicant's publication). And the reference, FIG.4 102 "management controller", also referred to as a "processor" in column 3 lines 10-13, obviously exhibits equal function within the system 100 of the reference as the applicant recited as system 200 in the application. Therefore, although the management processor of the claim ("IOP") is not identically disclosed or described as an "IOP", the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, therefore the invention is not patentable. Motivation for Li et al. is found in column 2 lines 33-43 of Li et al., where it is cited that testing of IC's in a management controller with an embed JTAG master eliminates the need for external test equipment. Motivated as suggested to eliminate costly test equipment, it would have been obvious to apply the teachings of Li et al. to solve the problem of burdensome and costly test equipment when testing IC's on a motherboard.

As per Claims 2, 3 and 10:

The claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. as applied to Claims 1 and 9 above. Li et al. teaches the server management controller of claim 1 or 9 wherein the JTAG interface uses an ICE or ITP methodology. The examiner reminds the applicant that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). And in view of the motivation previously stated, the claims are rejected.

As per Claims 4 and 11:

Li et al. further teaches the remote server management controller of claim 1 or 9 wherein the at least one integrated circuit comprises a microprocessor (FIG.2 30). And in view of the motivation previously stated, the claims are rejected.

As per Claims 5 and 13:

Li et al. further teaches the remote server management controller of claim 1 or 9 wherein the at least one integrated circuit comprises a component of a chipset (column 1 lines 5-8). And in view of the motivation previously stated, the claims are rejected.

As per Claims 6 and 12:

Li et al. further teaches the remote server management controller of claim 1 or 9 wherein the JTAG master is adapted to program the at least one integrated circuit

(column 5 lines 53-58). And in view of the motivation previously stated, the claims are rejected.

As per Claims 7 and 14:

Li et al. further teaches the remote server management controller of claim 1 or 9 wherein the IOP is adapted to be programmed to control the JTAG master to perform an initial test of the at least one integrated circuit when the managed server is powered up (column 5 lines 23-26 and column 1 lines 22-32). And in view of the motivation previously stated, the claims are rejected.

As per Claims 8 and 15:

Li et al. further teaches the remote server management controller of claim 1 or 9 wherein the IOP is programmed with descriptive data about the at least one integrated circuit (column 6 lines 32-33). And in view of the motivation previously stated, the claims are rejected.

As per Claims 16 and 20:

Li et al. teaches a method of communicating with an integrated circuit (FIG.2 30) in a managed server (column 1 lines 19-20), the managed server having a remote server management controller (FIG.1 14, and column 2 lines 13-14) in operative communication therewith (see FIG.1), the remote server management controller having an IOP (as described in Claims 1 and 9) and a JTAG master (FIG.1 16) disposed thereon for operative communication with each other (see FIG.1), the JTAG master having a JTAG interface (FIG.2 42) connected for operative communication to the integrated circuit (FIG.2 30), the method comprising the acts of: receiving data at the

IOP of the remote server management controller (FIG.4 102 receives via 104 or 120 or 110); transmitting the data from the IOP to the JTAG master (embedded in FIG.4 102); transmitting the data from the JTAG master to the integrated circuit via the JTAG interface (FIG.2 42). And in view of the obviousness and motivation stated in Claim 1 and 9, the claims are rejected.

As per Claim 17:

Li et al. further teaches the method of claim 16, further comprising the act of programming the IOP to control the JTAG master to perform a boundary scan of the integrated circuit when the managed server is powered up (column 5 lines 23-26 and column 1 lines 22-32). And in view of the motivation previously stated, the claim is rejected.

As per Claim 18:

Li et al. further teaches the method of claim 16 further comprising the act of programming the IOP with descriptive data about the integrated circuit (column 6 lines 32-33). And in view of the motivation previously stated, the claim is rejected.

As per Claim 19:

Li et al. further teaches the method of claim 16 further comprising the act of programming the integrated circuit (column 5 lines 53-58). And in view of the motivation previously stated, the claim is rejected.

As per Claim 21:

Li et al. teaches a method of using a computer comprising; connecting a computer to a remote server management controller disposed in a managed server;

and communicating with an integrated circuit disposed in the managed server via a JTAG interface associated with the remote server management controller (see Background and Summary of invention, also column 5 lines 1-16, and FIG.4 126 to 102 via 122, 120, and 102 to 128 via JTAG). The concept of remote testing is not specifically cited per se in Li et al., but is suggested, and it is obvious to one of ordinary skill in the art at the time of the invention. In this regard, the disclosure by Li et al. as follows; "This also eliminates the need for a skilled technician to visit a system site and disassemble a system to perform JTAG tests" (column 2 lines 37-39), suggests to the examiner that the testing of the IC is being performed from a remote computer (such as FIG.4 126). And in view of the motivation previously stated, the claim is rejected.

As per Claim 22:

Li et al. further teaches the method, as set forth in claim 21, wherein communicating with the integrated circuit is controlled by an IOP. The IOP described in Claims 1 and 9 is used as reference here, and in view of the motivation previously stated, the claim is rejected.

As per Claim 23:

Li et al. further teaches the method, as set forth in claim 21, wherein the integrated circuit comprises a microprocessor (FIG.2 30). And in view of the motivation previously stated, the claim is rejected.

As per Claim 24:

Li et al. teaches a method of manufacturing a computer comprising: disposing a remote server management controller in a server (FIG.1), the remote server

management controller comprising: an IOP (as described in Claims 1 and 9); an embedded JTAG master (FIG.1 16) that is controllable by the IOP (FIG.1 14), the embedded JTAG master having a JTAG interface (FIG.2 42); and an integrated circuit disposed in the managed server (FIG.2 30) and connected for operative communication to the JTAG interface (FIG.2 42), and wherein the JTAG master is configured to be accessed remotely (column 5 lines 7-15) through the remote server management controller (FIG.4 102 via modem and 106, or 120 via Ethernet) to provide communication between a client computer and the integrated circuit (column 2 lines 37-39) via the JTAG interface. And in view of the obviousness stated in Claim 21 and the motivation stated previously, the claim is rejected.

As per Claim 25:

Li et al. further teaches the method, as set forth in claim 24, wherein the integrated circuit is located on a motherboard (column 1 lines 19-20). And the motivation stated previously, the claim is rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Trimmings whose telephone number is (571) 272-3830. The examiner can normally be reached on Monday through Thursday, 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John P Trimmings
Examiner
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